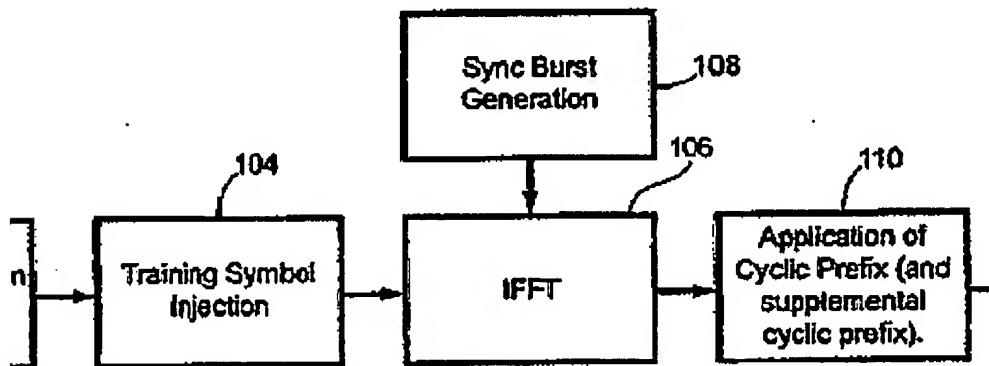


Remarks

Claims 25-43 were rejected under 35 USC §103(a) as being unpatentable over Jones in view of Jones IV.

I. The prior art fails to teach or otherwise suggest that each frequency synchronization burst is transmitted at a particular, but differing frequency offset from a center frequency.

Analysis of Jones reveals that Jones generates a frequency-domain frequency burst pattern as shown in FIG. 3. However, Jones passes the synchronization burst pattern through an Inverse Fast Fourier Transform prior to transmission. This is evident in FIG. 1, (reproduced below) where sync burst generator 108 is output to IFFT block 106. Because an IFFT of the frequency burst will convert the frequency burst pattern to the time domain, Jones' sync burst pattern will be transmitted as a time-domain signal. Thus, Jones fails to teach or otherwise suggest that each frequency synchronization burst . . . is transmitted at a particular, but differing frequency offset from a center frequency. Because of this, claims 25-43 are in proper condition for allowance.



Taken from Jones (6,876,675), FIG. 1

II. The prior art fails to teach or otherwise suggest that each frequency synchronization burst contains bits identifying a particular frequency offset for the burst.

The applicants specifically claim the fact that each synchronization burst contains bits identifying a particular frequency offset for the burst. This is neither taught nor suggested by the prior art cited by the Examiner. While Jones does state that "non-zero symbols" exist within each synchronization burst, Jones states that these symbols "carry training information or system configuration data." (Col. 6, lines 41-43). Jones additionally states that the training symbols may carry "data in the form of phase differences between sets of training symbols in successive bursts" (Col 6, lines 52-54), however "phase difference between sets of training symbols" is not what the Applicants are claiming. The Applicants are specifically claiming that the frequency synchronization bursts contain bits identifying a particular frequency offset for the burst. Therefore, claims 25-43 are in proper condition for allowance.

In summary, the Applicants specifically claim the fact that:

- each frequency synchronization burst is transmitted at a particular, but differing frequency offset from a center frequency; and
- each frequency synchronization burst contains bits identifying a particular frequency offset for the burst.

These elements are neither taught, nor suggested by the prior art cited. Because of this, claims 25-43 are in proper condition for allowance.

#### EXAMINER INTERVIEW

On October 17<sup>th</sup> 2005 Applicants representative had a telephone conversation with Examiner Ho. In the phone conversation the Applicants pointed out that they are specifically claiming the fact that their burst contains bits identifying the frequency offset of the burst, and that no reference teaches this fact.

Examiner Ho pointed to the Jones reference, Col. 5, lines 20-26, where Jones states that a "supplemental cyclic prefix" can be used "to acquire burst and timing frequency offset." Examiner Ho insists that using a cyclic prefix to acquire burst and timing frequency offset is identical to having a burst containing information regarding the frequency offset of the burst. The Applicants *strongly* disagree.

Analysis of Jones reveals that Jones teaches exactly what his supplemental cyclic prefix contains. Particularly, Col. 6, lines 58-64 state:

FIG. 5 is a diagram of an OFDM burst 500 according to one embodiment of the present invention. OFDM burst 500, as depicted . . . includes a  $v$  length cyclic prefix 502 and a supplemental cyclic prefix 504 having length L. Together,  $v$  length cyclic prefix 502 and supplemental cyclic prefix 504 duplicate the last  $v+L$  of  $N$  time domain symbols. (Col 6, lines 58-64, *emphasis added*)

Thus, as taught by Jones, the supplemental cyclic prefix used for acquiring burst and timing frequency offset, contains only a repetition of time domain symbols. Jones in no way teaches or otherwise suggests that the burst contains bits identifying a particular frequency offset for the burst.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein; and no amendment made was for the purpose of narrowing the scope of any claim, unless Applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references. As the Applicant has overcome all substantive rejections given by the Examiner the Applicant contends that this Amendment, with the above discussion, overcomes the Examiner's rejections to the pending claims. Therefore, the Applicant respectfully requests allowance of the application. If the Examiner is of the opinion that any issues regarding the status of the claims remain after this response, the Examiner is invited to contact the undersigned representative to expedite resolution of the matter. Finally, please charge any fees (including extension of time fees) or credit overpayment to Deposit Account No. 502117.

Respectfully Submitted,  
Gorday, ET AL.

by: 

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